BRUHAT BANGALORE MAHANAGARA PALIKE

Excecutive Engineer Project Division Yelahanka

Name of Work: Providing drinking water through bore wells in ward no 08, Kodigehalli

Sl No	Description of item	Unit	No	L	B	D	Qty	Est Cost= Rate	75.00 Lakhs Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P.47, I. 9.4) PRED.SR 2012-13**								
	Basic Rate	1882							
	Area Weightage 3%	56.46							
	Total	1938.46							
			8				8	1938.46	**15507.68**
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (0-50m)**								
	Basic Rate	306							
	Area Weightage 3%	9.18							
	Total	315.18							
	0 to 50 m		8	50.00			400.00	315.18	**126072.00**
3	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (50-100m)**								
	Basic Rate	400							
	Area Weightage 3%	12							
	Total	412							
	50 to 100 m		8	50.00			400.00	412.00	**164800.00**
4	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (100-150m)**								
	Basic Rate	445							
	Area Weightage 3%	13.35							
	Total	458.35							
	100 to 150 m		8	50.00			400.00	458.35	**183340.00**
5	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (150-200m)**								
	Basic Rate	470							

	Area Weightage 3%	14.1							
	Total	484.1							
	150 to 200 m		8	50.00			400.00	484.10	193640.00
6	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (200-250m)**									
	Basic Rate	544							
	Area Weightage 3%	16.32							
	Total	560.32							
	200 to 250 m		8	50.00			400.00	560.32	224128.00
7	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (251-300m)**									
	Basic Rate	583							
	Area Weightage 3%	17.49							
	Total	600.49							
	251 to 300 m		8	50.00			400.00	600.49	240196.00
8	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (300-350m)**									
	Basic Rate	622							
	Area Weightage 3%	18.66							
	Total	640.66							
	300 to 350 m		8	50.00			400.00	640.66	256264.00
9	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2012-13 (350-400m)**									
	Basic Rate	622							
	Area Weightage 3%	18.66							
	Total	640.66							
	350 to 400 m		6	50.00			300.00	640.66	192198.00
10	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) **SE PRED III NO 84**									
		Rmtr	8	56.00			448.00	1325.00	593600.00
11	Providing 250mm dia PVC Pipe **BWSSB SR 16-17 PNO 57 SL NO 11**								
		Rmtr							
			8	21.00			168.00	1144.00	192192.00
12	Providing 175mm dia ms casing cap **page no III it no 85 pred 12-13 sr**								
		no	8				8.00	100.00	800.00
13	Providing MS Casing pipe collars **page no III it no 86 pred 12-13 sr**								

			8	10.00			**80.00**	150.00	**12000.00**
14	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / **Atalanta**/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings . PAGE NO **XXXXII**								
	15 HP 30 Stage		8				**8**	67307.88	**538463.04**
	Basic Rate	63498							
	Area Weightage 6%	3809.88							
	Total	67307.88							
15	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and Powder coated extrued PVC sheathed suitable for working voltage upto 1100 Volts as per IS - 694 ; 1990 AND CONFORMING TO gtp OFGROUP A **P. No. 12/ I No. (2.10.4) 3cx 6.0 Sqm KPWD Electrical SR 2014-15**								
	Mtr	2	8	385.00			**6160.00**	188.70	**1162392.00**
16	Labour charges for erection of new/ repaired submersible pumpset along with gi pipes inculding transportion each length **pno 558 ino 3 bwssb sr 14-15**								
		NO	8	62.00			**496**	88.00	**43648.00**
17	Supplying and flush polished wood board with out front frount plank made of not less than 15mm thick plank after due groove cutting Finishing with necessary on **fixing the same to the wall using tapered** inverted wooden plugs screws etc., **P No. 44No.6.6.6 KPWD Electrical SR 2014-15**								
	20x20x2.5	Each	8				**8**	302.00	**2416.00**
18	Supplying of 1.1 KV LT UG cable having aluminium condutor PVC insulated shethed, EXTREDED INNER SHEATHRD galvnised steel,stirp confirming IS 3975;1990 AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group.**P No.55/ I No.7.4.4 (4 core 16 Sqmm) KPWD Electrical SR 2014-15**								
		Mtr	8	10.50			**84.00**	140.40	**11793.60**
19	Labour charges for laying of 1.1 K.V class UG cable, **P No. 61 / I No. 7.8.1 In existing trencg/duct 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15**								
		Mtr	8	10.50			**84.00**	10.80	**907.20**
20	Digging or trenching of 0.6m deep x 0.5 mtr wide refilling the trench to the required ground level and consolidating etc., complete**P No. 62/ I. No.7.9.4 KPWD Electrical SR 2014-15**								
	For Cutting Road Surface aspalt	Mtr	8	10.50			**84.00**	117.00	**9828.00**
21	Supplying and fixing of Class A (meaium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class **P. No. 62/ I No.7.12.1 KPWD Electrical SR 2014-15**								
	40mm dia GI pipe	Mtr	8	3.00			**24.00**	345.00	**8280.00**
22	Supplying and fixing L.T. cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., **P. No.62/ I No. 7.13.2 KPWD Electrical SR 2014-15**								
	16Sqmm	NO	8				**8.00**	280.00	**2240.00**
23	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia, **(P No.55, I No. 7.1) KPWD Electrical SR 2014-15**								
		NO	8				**8**	2727.00	**21816.00**

24	Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... **P No44/I No 6.7.4 KPWD Electrical SR 2014-15**								
	100 Amps	Each							
		8	3				**24**	360.00	**8640.00**
25	Supplying and fixing of heavy duty glands for ug cable 1.1 kv etc., complete.... **P No62 I No 7.14.2 KPWD Electrical SR 2014-15**								
	25mm dia	Each							
		8	6				**48**	86.00	**4128.00**
26	Supplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 32 amps triple pole with all lead and lift, loading, unloading and labour charges etc complete as per specifications **pno 47 IT 6.16.5 KPWD Electrical SR 2014-15**								
		Each	8				**8**	1547.00	**12376.00**
27	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.33 **P.No. 49, I. No.6.40.2 KPWD Electrical SR 2014-15**								
	16SWG	Sq.Cm	16	300.00	60.00		288000.00		
			8	400.00	25.00		80000.00		
							368000.00	0.33	**121440.00**
28	Gate value 50 mm nominal bore gun metal **P. No.xxiii sl No. 673 PWD SR**								
	50mm dia	NOS	8	3.00			**24**	1650.00	**39600.00**
29	NIPPLE 50 mm nominal bore gun metal **P. No.xxXIXiii FITTINGS PWD SR**								
	50mm dia	NOS	8				**8**	104.30	**834.40**
30	S BEND 50 mm nominal bore gun metal **P. No.xxXIXiii FITTINGS PWD SR**								
	50mm dia	NOS	8	3.00			**24**	219.00	**5256.00**
31	TEE 50 mm nominal bore gun metal **P. No.xxXIXiii FITTINGS PWD SR**								
	50mm dia	NOS	8				**8**	169.00	**1352.00**
32	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. **PRED Bangalore Circle SE Approved Date 30.07.2010 15HP to 30 HP Star Delta Starter**								
		NO	8				**8**	10000.00	**80000.00**
33	Providing and installing at site of work pvc pipes including cost of pipes and special and labour including lowering into trenches laying true to line level and prefect linking at joints, leak proof including jointing of approved type with all labour and lift charges handling charges including encasing the pipes all round to a depth not less than 15 cms with gravel or selected earth available from the excavation etc. complete PVC pipe of 6kg/cm2 75 mm (0.662) **(Page no.13, Item No.7.1.5) (kuws and db)**								
			8	245.00			1960.00		
	Basic Rate	128.00							
	Total	**128.00**			Per Rmtr		**1960.00**	128.00	**250880.00**

34	BESCOM Deposit and installing of Meter		8				**8**	14640.00	**117120.00**
35	KSRB13-3.1: Providing and fixing to wall celling and floor glavanised/ mild steel tubes (medium grade 1.27 kg /mt) B class **50 mm dia** nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. **(Page 92 ITEM NO 13.6)**								
	Basic Rate	512.00							
	Area Weightage @6%	30.72							
	Total	**542.72**							
		Mtr	8	368.00			**2944.00**	542.72	**1597767.68**
36	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 (Page No.95 Item No. 13.55 / PWD SR 2018-19)								
	Basic Rate	1330.00							
	Area Weightage @ 6%	79.80							
	Total	**1409.80**							
		NOS	8				**8**	1409.80	**11278.40**
37	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. **(P. No.97/ I. No. 13.81.3 PWD SR)**								
	Basic Rate	254.00							
	Area Weightage @ 6%	15.24							
	Total	**269.24**							
	50mm dia	NOS	8	2.0			**16**	269.24	**4307.84**
38	Earth work excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, in ordinary soil, exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with all lead upto 50m after breaking of clods complete as per specifications.**(P.No.6, I.No.2.1) (SR of PWD)**								
	Earth work		8	245.00	0.60	0.60	705.60		
	Basic Rate	249.00							
	Area Weightage @ 6%	14.94							
	Total	**263.94**			Per Cmtr		**705.60**	263.94	**186236.00**
39	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications Specification No.KBS 2.1 **.(Page No.7, Item No. 2.10)**								
	Filling		8	245.00	0.60	0.60	705.60		
	Deduction								
	pipe Volume		-8	245.00	0.03		-58.80		
	Basic Rate	201.00			**Total**		**646.80**	213.06	**137807.00**
	Area Weightage @ 6%	12.06							
	Total	**213.06**							

	A.Sub Total Cost of KPWD SR items	2475859.96
40	B.Total Construction Cost	6775544.84
41	C.Cost towards PMC / Third Party inspection LS=A*2%	135511.00
42	D.Cost towards 12% GST on KPWD SR Items and PMC Charhes=(A+C)*12%	313364.52
43	E.Cost towards 3% KRIDL Charges+ 1% CESS=B*4%	271021.79
	F.Sub Total=(B+C+D+E)	7495442.15
44	G.Miscellaneous and rounding off	4,557.85
	H.Total=(F+G)	7500000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, KPWD Electrical SR 2014-15 & PRED SR 2012-13

12/10/18

Assistant Engineer
Project Division Yelahanka
BBMP Bangalore

Asst. Executive Engineer,
Project Division Yelahanka
BBMP Bangalore

Executive Engineer,
Project Division Yelahanka
BBMP Bangalore

Administrative Approval
Accorded For Rs 25 lacche only
Head of A/C P 3293
CER NO :15 Dt:30.11.18

ICE (YNK)

Technical Sanction
Accorded For Rs 25 lacche only
Head of A/C P3293
CER NO :TS/109/18 Dt:30.11.18

TA ICE (YNK)